**GROUP #:**

**GROUP MEMBERS PRESENT:**

Fill in Table B in the same way we filled in Table A together, but with container A now analogous to groundwater. The terms that you will use include: *stream, atmosphere, condensation, surface water, discharge, evaporation, lake, cloud, precipitation*.

Table B. Aligning the system to the water cycle including groundwater.

|  |  |  |
| --- | --- | --- |
| **Simple system** | **Water cycle** | **Phase** |
| Container A |  |  |
| Container B |  |  |
| Container C |  |  |
| Container D | *Groundwater* |  |
| Container E |  |  |
| Container F |  |  |
| Pipe 1 |  |  |
| Pipe 2 |  |  |
| Pipe 3 |  |  |
| Pipe 4 |  |  |
| Pipe 5 | *Infiltration* |  |
| Pipe 6 | *discharge* |  |

**Causal Principles**

When components of two domains are analogous, a common principle can be used to describe both. For every corresponding pair of components in Table C, identify the causal principle the two processes have in common.

Table C. Causal principles related to the water cycle

|  |  |  |
| --- | --- | --- |
| **Simple system** | **Water cycle** | **Causal Principle** |
| Water moves between containers | Water moves between reservoirs |  |
| Water is pumped in Pipe 2 | Energy is used for evaporation |  |
| Water drips in Pipe 4 | Precipitation |  |
| Water flows in one or two directions between containers. | Water my flow in one or two directions between reservoirs. |  |

**Question:**

A. Imagine the process of condensation in Earth’s atmosphere stops. How would this affect flow of water in streams? Use the steps of the water cycle to explain your reasoning.